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AUTHOR Brown, Clair
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ABSTRACT

The degree to which wives' work decisions reflect the fulfillment of efficiency principles versus a response to social norms and personal needs was analyzed. The National Longitudinal Survey of Women, who were 30 to 44 years of age, provided the data base. To determine if women's work decisions were consistent with maximizing their economic return to work (the maximum market value of their maximum work hours), a wage rate and a time frame of socially required and unconstrained time were formulated. An income test (the family income excluding the woman's earnings does not equal the poverty threshold) was also considered. Use of the standard efficiency test based on wages indicated that women's work decisions were not very economical. The majority of the decisions were market-oriented; women were working more than predicted. The standard interpretation of the outcome would be that these women subjectively value the market goods and services they buy with their earnings more than they value the output of their home activities. (YLB)

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How "Economic" Are Women's Work Decisions?

by

Clair Brown
Associate Professor of Economics
University of California, Berkeley

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This paper is a preliminary report on research in progress. It was presented at the American Sociological Meetings in San Francisco, September 1982. Comments are welcome.

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Economists studying the large influx of married women into the labor force since the 1940's have relied on neoclassical theory to provide a logical framework with which to measure women's response to higher wages as a combination of income and substitution effects. Since more women have worked for pay as female wages have risen, the substitution effect has been observed to predominate over the income effect, i.e., women have increased their paid labor because the opportunity cost of nonmarket work or leisure has become so high. The economists' answer to the question of why more women have become employed is simple: it has become too expensive not to work.

The answer begs the question, since measuring substitution and income effects does not help us understand the forces that created these effects. The degree to which the wife's work decision reflects the fulfillment of efficiency principles versus a response to social norms and personal need is analyzed. An institutional approach is used to analyze the importance of maximizing the economic return to work as a determinant of women's paid work decision.

I. The Women Being Studied

The National Longitudinal Survey (NLS) of Women, who were 30 to 44 years of age during the initial survey year 1967, provides the data base for studying women's work decisions. The 4500 women surveyed show that the largest group of women (45%) were employed sporadically over the survey period 1967-1974. (See Table 1.) The remaining women were divided into two groups -- those who worked over the entire period (29%) and those who were never employed during the period (26%).(1)

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II. The Potential Economic Return to Work

In order to ask if women's work decisions are consistent with maximizing their economic return to work (i.e., the maximum market value of their maximum work hours), we need to have a wage rate for each woman as well as the time frame she faces of socially-required housework and unconstrained time.

A. The market wage rate

For those women who reported a 1974 wage rate, we can use their observed wage. For those without an observed 1974 wage, we need to estimate their potential market wages. How to impute wages to women who are not employed has received a great deal of attention. The typical approach is to estimate a wage equation for the population of employed women using human capital variables and adjusting for truncation bias.(2) Although this approach is statistically sophisticated, its low predictive power(3) makes it inappropriate here since we want to assign a realistic market wage to each woman rather than explain the earnings differentials among women. Therefore, the approach taken here uses previous wage information to predict 1974 wages.

Sixty-two percent of the sample (2798 women) reported an hourly wage rate in 1974 and in a previous survey. Their median wage in 1974 fell between $2.01 and $2.50. (See Table 2.) Almost 60% of these women earned between $1.61 and $3.50; 15% earned $1.60 and less; 26% earned over $3.50. One-third of the women were earning a wage less than or equal to the minimum wage rate, which rose from $1.60 to $2.00 on May 1, 1974.(4) For these women, the following regression was estimated(5):

$$\log W_{74} = \underset{(.012)}{.8222} \log W_t + \underset{(.0087)}{.0552}\, T1 - \underset{(.0062)}{.0525}\, T2 + \underset{(.0017)}{.0155}\, ED + u$$

$$\bar{R}^2 = .74$$

Table 1. Labor Force Activity of Women in Sample (1967-1974)

Group	Number	Percent	Description
A.	1298	29%	Wage reported each survey year
S.	2028	45	Wage reported at least one survey year
H.	1170	26	No wage reported during survey period
	4496*		

*This excludes 587 cases that had "missing observations," which primarily were people dropped from the survey.

Table 2. 1974 Wage Rate Distribution

Amount	Percent
≤$1.00	.5%
$1.01-$1.59	8
$1.60-$2.00	21
$2.01-$2.50	17
$2.51-$3.00	12
$3.01-$3.50	11
$3.51-$4.00	8
$4.01-$5.00	10
>$5.00	8
	100%

with the variables defined as follows:

W_{74} wage rate in 1974

W_t wage rate in the most recent survey year t preceding 1974

T1 years between t and 1974, (1974 - t)

T2 equals T1 if T2 > 2, otherwise equals 0; T2 can equal 0, 3, 5, or 7.

ED years of formal schooling (12 = high school graduation)

u error term

This equation gives us an estimation of the typical growth rate of wages. This growth rate has a yearly component that takes on two values -- one for women with wages in the previous 1972 survey (coefficient on T1) and one for women without a 1972 wage (coefficients on T1 and T2). The growth rate also has a component that reflects years of education. The growth rates associated with time are 11.7% for 1972 wages, .8% for 1971 wages, 13.5% for 1969 wages, and 18.9% for 1967 wages.(6)

This regression was used to predict a 1974 wage for the 180 women without a 1974 reported wage but with a wage reported in a previous survey.

B. The time frame

The institutional approach used here assumes that social norms require a certain amount of housework that maintains daily life (i.e., meal preparation and clean-up, family care, clothing care, house care, shopping and management). Custom also governs how these home activities are done, so that a certain amount of socially-required housework is considered the wife's job and cannot be substituted, while a portion of the housework is substitutable through exchange (i.e., it can be provided in the marketplace or it can be partially reduced by the use of market goods and services).(7) If the wife has a total maximum work day of 13 hours, which leaves 8 hours

for sleeping, one hour for eating, one hour for grooming, and one hour for resting, then her daily time frame has three components -- housework hours without substitution (T0), housework hours with substitution possible through exchange (T1), and unconstrained time (T2 ≡ 13 - T0 - T1). The socially-required housework hours, both with no substitution and with substitution allowed, depend on the number and ages of children in the home. The assumed values for T0 and T1 used in this paper vary only by the number of children and reflect social norms empirically observed in time budget studies (see Table 3).

In addition to the time constraints imposed by housework, each family has a minimum income constraint, i.e., the family needs money income Y equal to the government's poverty threshold in order to function within the society. If the family does not have income Y outside of the woman's earnings, the woman will be required to work. If the family cannot meet both the required time input (T0 + T1) and money input (Y), we assume that the family will not stay intact but will be forced to change its composition.

In order to calculate the market value of the wife's work, we need to assume a value for housework time T1 and unconstrained time T2 spent in additional housework. T1 is assumed to have a higher market value than T2; the value of T1 is calculated by using the market wage rate paid child care and home care workers in Syracuse, N.Y., which averaged $2.95 in 1974.(8) T2 is assumed to be equal to the minimum wage of $2.00. These gross wages need to be adjusted for taxes and work-related expenses, which are assumed to equal .30 to .34 at moderate earnings levels and .20 to .24 at low earnings levels.(9) Table 4 gives these net "break-even" wages (w*). The relevant wage rate for a woman's work decision depends on whether or not the

Table 3. Institutional Time Frame (Hours per 5-day workweek)

No. of Children	Housework			Unconstrained Time	Max. Paid Hours
	No Substitution T_0	Substitution Allowed, T_1	Total T_0+T_1	$T_2=13-T_0-T_1$	T_1+T_2
0	19	10	29	36	46
1	25	12	37	28	40
2-3	29	12	41	24	36
4-6	31	13	44	21	34

Source: t_0 is average housework time for employed wives; T_1 is average housework time for full-time homemakers. Calculated from K. Walker and M. Woods, Time Use: A Measure of Household Production of Family Goods and Services, Tables 3.4, 5.5, 7. The time frame for single mothers is assumed to be the same on the basis that husbands contribute housework equal to their own maintenance time (i.e., total housework time increases but wife's housework time does not).

Table 4. Calculation of Break-even Wages (W*)

	Gross Wage Rate	Implicit Tax Rate	W* Net Wage Rate[a/]
Substitution Housework	$2.95	.66	$4.45
	2.95	.76	3.85
Minimum Wage	$2.00	.7	$2.85
	2.00	.8	2.50

[a]Rounded down to the nearest $.05.

Table 5. Weekly Hours of Paid Work for Given Break-even Wage

Number of Children	wife $w \geq \$2.85$ / single woman $w \geq \$2.50$	wife $w \geq \$4.45$ / single woman $w \geq \$3.85$
0	29-40 hrs.	37-46
1	22-31	32-40
2-3	19-26	29-36
4-6	17-23	27-34

work time must be replaced; the hours available for paid work, both those that must be replaced and those that are unconstrained, depend on the family's composition.

C. Formation of Categories

The structure assumed with the time frame and break-even wages allows us to categorize women according to the economic appropriateness of their work decisions. The time frame in Table 3 is assumed to be more flexible by allowing women in accepting work hours to deviate +10% or -20% from the optimal hours shown.(10) The wife's net wage w^* used for unconstrained time is the minimum wage with an implicit tax (plus work expenses) rate of .3 and $2.95 wage rate with a tax rate of .34 for constrained time that must be replaced by housework substitutes. Similarly, single women's net wage w^* used for unconstrained time is the minimum wage with a tax rate of .2 and $2.95 wage rate with a tax rate of .24 for constrained time.

Women whose families do not pass the income test (i.e., the family income excluding the woman's earnings does not equal the poverty threshold(11)) will be categorized as follows:

1. Forced Worker: Woman should not be in labor force ($w < W^*$), but she is in labor force and does not meet income test.

2. Poor Homemaker: Woman should not be in labor force ($W < W^*$), she is not in labor force and does not meet income test.

Women whose families pass the income test are categorized according to whether their employment decisions are consistent with an economic calculation that maximizes the market value of work time. Decisions that are not consistent with such an economic calculation are termed "home-oriented" or "market-oriented."

3. Economic Worker: for given wage rate, woman's hours of paid

work are consistent with economic calculations. For example, a wife with two children and a wage rate of 3.00 who works 24 hours weekly and a single mother with one child and a wage rate of $4.00 who works 35 hours weekly are in this category.

4. Economic Homemaker: for given wage rate, woman's zero hours of paid work are consistent with economic calculations. For example, a wife with a wage rate less than $2.85 and a single mother with a wage rate less than $2.50 who are not in the labor force are in this category.

5. Market-oriented Worker: for given wage rate, woman's hours of paid work are too high according to economic calculations. For example, a wife with a wage rate less than $2.85 who is employed and a single mother with two children and a wage rate of $2.75 who works 32 hours weekly are in this category, which is comprised of both low wage ($w < w^*$) and high wage ($w \geq w^*$) women.

6. Home-oriented Worker: for given wage rate, woman's hours of paid work are too low according to economic calculations. For example, a wife with one child and a wage rate of $4.50 who works 30 hours weekly and a single woman with a wage rate of $4.00 who works 32 hours weekly are in this category.

7. Home-oriented Homemaker: for given wage rate, woman should be in labor market according to economic calculations, but she is not. For example, a nonemployed wife with a wage rate greater than $2.85 and a nonemployed single mother with a wage rate greater than $2.50 are in this category.

III. Empirical Results: Women with Work Experience

A. The Participation Decision

The categorization of the 1974 participation decision for women with work experience during the survey period 1967-1974(12) is shown in Table 5. If we judge these participation decisions strictly on the basis of the wage rate, then 46% of the women's work decisions are consistent with the economic criteria for efficiency (categories 2, 3, 4, 5 high wage, 6) and 54% of the decisions are not consistent with efficiency criteria (categories 1, 5 low wage, 7). However, when we expand the economic criteria to include the income test, then the 27% in category 1 become consistent with the economic model and the 3% in category 2 become inconsistent. Overall, 70% of the participation decisions are correctly predicted by the economic model with the income constraint and 30% are incorrectly predicted. Although the large majority of the employed women's participation decisions are economically consistent with the assumed institutional framework, less than half of them are economically efficient.

Most of the low-wage, low-income women ($w < w^*$ and fail income test) are "forced workers" (category 1). Few of them (10%) remained completely out of the labor force as "poor homemakers" in 1974. From a policy perspective, this means that most of the women in this hard-core poverty group with recent work experience remain attached to the labor market even though they earn low wages. Another small group of 19 women failed the income test but had a predicted wage $w \geq w^*$ and were not employed in 1974. From a policy perspective, these women are the only ones with recent work experience who are not working and who would be expected to be employed rather than collecting government support payments (if they were collecting benefits, which is not known). However, their extremely small number means

Table 5. The Participation Decision, 1974

Category (n = 2890)	Distribution	Consistency
1. Forced Worker ($w < w^*$, LY, LF)	27%	IW
2. Poor Homemaker ($w < w^*$, LY, NLF)	3	RW
3. Economic Worker ($w \geq w^*$, CH)	16	R
4. Economic Homemaker ($w < w^*$, NLF)	2	R
5. Market-oriented Worker (MH)	47	
Low wage ($w < w^*$)	(26)	I
High wage ($w \geq w^*$)	(21)	R
6. Home-oriented Worker ($w \geq w^*$, LH)	4	R
7. Home-oriented Homemaker ($w \geq w^*$, NLF, may also be LY)	1	I

Definitions: w is market wage; w^* is break-even wage; LY denotes the woman does not pass the income test; LF denotes in the labor force; NLF denotes not in the labor force; CH denotes correct number of paid hours; MH, LH denote too many and too few paid hours, respectively. Consistency may be R (economically rational), I (economically irrational), IW and RW (irrational and rational, respectively, on the basis of the wage alone but not on the basis of the income test).

that low-income women with work experience earn wages below the break-even wage and can be expected to need supplemental income support even when employed.

B. The Hours Decision

The test for the participation decision is a weak one, since it tells us nothing about whether the number of paid hours actually worked is economically efficient. The categorization of the 1974 hours decision for women employed in 1974 is shown in Table 6. On the basis of their wage rate, only 17% were working the number of hours predicted by efficiency criteria. Four percent were working too few hours, and 79% were working more hours than predicted by efficiency criteria. The large majority of those working too many hours had been predicted not to be in the labor force because their wage rate $w < w^*$. This group of employed women with $w < w^*$ was evenly divided between those constrained and those not constrained by other income. Since those constrained by other income are predicted to be employed,(13) a maximum of 46% of the employed women's work decisions are consistent with the assumed economic framework. Overall, the hours decision is not consistent with efficiency criteria, and the income constraint appears to be an important determinant of the employment decision. For those women who pass the income test, one-fourth (26%) make work decisions consistent with the assumed economic model. By far the largest group (67%) are market-oriented in their work decisions, so that they work more for pay than is economically efficient. Only 7% appear to be home-oriented in their work decisions.

Steady workers, those women who were employed in every survey year, show a different pattern of hours decision than sporadic workers, those women who were employed in at least one survey year but not in every survey

Table 6. The Hours Decision, 1974

Group	Percentage Distribution					
	$w < w^*$		$w \geq w^*$			Total
	LY	Not LY	LH	CH	MH	
Steady Workers (n = 1215)	22%	17%	4%	28%	30%	100%
Sporadic Workers (n = 1495)	36	37	5	8	15	100%
Total (n = 2710)	29	26	4	17	22	100%
New Entrants (n = 166)	32	41	7	7	13	100%

Definitions: w is the actual wage rate; w^* is break-even wage; LY denotes constrained by income; LH, CH, and MH denote too few hours, correct hours, and too many hours in labor market, respectively.

year. The hours worked by steady workers were much more likely (26%) to be consistent with efficiency criteria than were the hours worked by sporadic workers (8%). Steady workers were much less likely (59%) than sporadic workers (73%) to have a wage below w^*.

Over one-third of the sporadic workers were working for a wage less than w^* even though they passed the income test; another 36% had a wage $w < w^*$ but did not pass the income test. Sporadic workers could be characterized as low income/low wage workers.

A majority (52%) of sporadic workers could be categorized as market-oriented since they work more hours than predicted and are not constrained by income. A smaller proportion of steady workers (47%) could be characterized as market-oriented. Very few (4-5%) in either group were home-oriented. Overall, up to 50% of the work decisions of steady workers and up to 44% of the decisions of sporadic workers are consistent with the assumed economic framework. The income constraint is a more important factor for sporadic than steady workers.

For those women with $w \geq w^*$, who are the women most likely to make their hours decisions based on efficiency principles, 40% were working the efficiently-correct number of hours and 51% were working more than the efficiently-correct number of hours. Within this group, 45% of steady workers were working the efficiently-correct number of hours and 48% were working more hours. Within this group, 29% of sporadic workers were working the efficiently-correct number of hours and 54% were working more hours.

C. Characteristics of Steady and Sporadic Workers

The small group of sporadic workers who were employed in 1974 but were not employed in any other survey year, called the new entrants, have

the same pattern for their hours decision as all sporadic workers (see Table 6). Since three-quarters of the sporadic workers would not be expected to work for pay based on their low wages (see Table 7), the economically-puzzling aspect of their work behavior is not its sporadic nature but rather that they work for pay at all. Almost half (46%) of the sporadic workers earned wages less than or equal to the minimum hourly wage of $2.00, and only one-quarter (24%) earned wages over $2.85. In contrast, only 19% of the steady workers earned wages under $2.01. Over half (52%) of the steady workers earned wages over $2.85 and almost one-fifth (19%) earned wages over $4.46.(14)

Although the majority (52%) of sporadic workers worked 40+ hours per week, three-quarters (73%) of steady workers worked 40+ hours per week. Few (6%) steady workers worked less than 22 hours per week, while one-fifth (22%) of the sporadic workers did (see Table 7).

Sporadic workers also differed from steady workers in their number of children -- they were more likely to have children at home, to have a child less than 6, and to have 3 or more children (see Table 6). Sporadic workers were similar to full-time homemakers (i.e., those women with no work experience during the survey years) in the number and ages of children at home.

IV. Empirical Results: Homemakers

Homemakers resemble sporadic workers in ways other than the number and age of children. They also have similar distributions for years of education and years of work experience prior to the survey (i.e., before 1967). These similarities are the basis for the assumption that homemakers and sporadic workers face the same opportunities in the labor market.

Table 7. Characteristics of Steady and Sporadic Workers, 1974

Wages (hourly)	Steady Workers	Sporadic Workers
<$1.59	7%	22%
$1.60-2.00	12	24
$2.01-2.50	16	19
$2.51-3.35	27	19
$3.36-5.00	25	9
>$5.00	13	7
Hours of Work (weekly)		
<22 hours	6%	22%
22-39	21	26
40+	73	52
Presence of Children at Home		**Homemakers**
% with child < 6 years	6%	17%	20%
% with child < 14 years	39	62	65
% with no children	42	23	23
% with 3+ children	19	36	36

A large majority (86%) of homemakers had a husband present in 1974, but 37% of their husbands did not have earnings above the poverty threshold. (See Table 8.) Altogether, almost one-half (47%) of the homemakers did not live in families with earnings above the poverty threshold, which was the same situation faced by sporadic workers.

On the basis of their assumed wage rates, three-quarters of the homemakers were rationally not in the labor force because their wages were below the break-even wage, and one-quarter were expected to be in the labor force ($w \leq w^*$). However, only 40% were "economic homemakers" with both a low wage and husband's earnings above the poverty threshold. The other 35% with low wages did not live in families that passed the income test. Therefore, on the basis of wages and the income test, 60% of the homemakers would have been expected to be in the labor force at least part of the time. The home-oriented homemakers ($w \geq w^*$) were evenly divided between those that passed the income test and those that did not.

Overall, the full-time homemakers would generally be predicted to be out of the labor force on the basis of their wages. Adding the income test greatly increases the proportion that we would expect to be in the labor force. Not surprisingly, this result is the mirror image of our predictions for sporadic workers. Both groups are characterized by low income and/or low wages, with the sporadic workers more oriented to the market and the homemakers more oriented to the home.

V. Conclusions

Together the results for the experienced workers and the homemakers give us the outcomes for the entire sample (see Table 9).

On the basis of wages alone, over one-half (55%) of the women (cat-

Table 8. The Participation Decision for Homemakers, 1974

Family Status (n = 1000)	Population	$w < w^*$	$w \geq w^*$
Husband Present	84%	64%	20%
Pass income test	(53)	(40)	(13)
Fail income test	(31)	(24)	(7)
No Husband Present	16	10	6
Total	100%	75%	25%

Category	Distribution	Consistency
2. Poor Homemaker ($w<w^*$, LY, NLF)	35%	RW
4. Economic Homemaker ($w<w^*$, NLF)	40	R
7. Home-oriented Homemaker ($w\geq w^*$, NLF)	25	I
Passes income test	(12)	
Fails income test	(13)	
Total	100%	

Definitions are the same as for Table 5. w^* is \$2.85 for wives and \$2.50 for single women.

Table 9. The Work Decision for All Women, 1974

Category (n = 3890)	Distribution	Consistency
1. Forced Worker ($w < w^*$, LY, LF)	20%	IW
2. Poor Homemaker ($w < w^*$, LY, NLF)	11	RW
3. Economic Worker ($w \geq w^*$, CH)	12	R
4. Economic Homemaker ($w < w^*$, NLF)	12	R
5. Market-oriented Worker (MH)	35	
Low wage ($w < w^*$)	(15)	I
High wage ($w \geq w^*$)	(20)	R
6. Home-oriented Worker ($w \geq w^*$, LH)	3	R
7. Home-oriented Homemaker ($w \geq w^*$, NLF)	7	I
Passes income test	(3)	
Fails income test	(4)	
Total	100%	

Definitions are the same as for Table 5.

Table 10. Summary of Predictions, 1974

	Test	
Participation Outcomes (n = 3890)	Wage only	Wage and income
Correctly predict in labor force	35%	55%
Correctly predict not in labor force	23	12
Percent correct	58	67
Incorrectly predict in labor force	7	18
Incorrectly predict not in labor force	35	15
Percent incorrect	42	33
Total	100%	100%
Category (n = 3890)		
Market-oriented	55%	35%
Home-oriented	10	21
Economic	35	44
Total	100%	100%

egories 1 and 5) are market-oriented in their work decisions and 10% (categories 6 and 7) are home-oriented (see Table 10). The remaining 35% (categories 2, 3, 4) make work decisions consistent with efficiency criteria. When we add the income test, 35% (category 5) are market-oriented, 21% (categories 2, 6, and 7) are home-oriented, and 44% (categories 1, 3, and 4) are economic in their work decisions. Only 4% of the women have $w \geq w^*$, fail the income test, and are not in the labor force.

If we consider the participation decision only, then our economic model correctly predicts 58% of the decisions on the basis of the wage rate alone (see Table 10). Most of the incorrect predictions are the 35% of the sample who are predicted to be out of the labor force but who are in fact in the labor force.

When we add the income test, two-thirds of the work decisions are correctly predicted; the incorrect predictions are now almost evenly divided between not in the labor force and in the labor force. Of those women actually in the labor force, 79% are correctly predicted. Of those not in the labor force, only 40% are correctly predicted. Although the income test increases the percent correctly predicted to be in the labor force (category 1) by 20 percentage points, it also increases the percent incorrectly predicted to be in the labor force (category 2) by 11 percentage points.

How economic are women's work decisions? Using the standard efficiency test based on wages, we would have to answer "not very," since only one-third of the women's work decisions were consistent with this test. The majority of the decisions were market-oriented, meaning that women were working more than predicted. The standard interpretation of this outcome is that these women subjectively value the market goods and services they

buy with their earnings more than they value the output of their home activities (including leisure). In effect, they do not value their time at home as much as the assumed break-even wages. This result is indirect confirmation of the lack of substitutability of housework and market purchases. Assuming this lack of substitution, the market-orientation becomes more understandable when we add the income test -- over one-third (35%) of the market-oriented women failed the income test.

Even with the income test added, only 44% of the work decisions are categorized as economic. Women still seem to be more oriented toward employment than economic reasoning alone would lead us to believe.

Footnotes

I would like to thank Todd Easton and Julie Hansen for doing the computer programming.

1. The sample includes those who were still part of the survey by 1974. This is about 85% of the original sample in 1967.

2. For a discussion and comparison of OLS, Tobit, logit and Heckman procedures, see John F. Cogan, "Labor Supply and the Value of the Housewife's Time", Rand Corporation, April 1975. See also J. Heckman, "Shadow Prices Market Wages and Labor Supply," Econometrics, July 1974; G. Henoch, "A Multiracial Model of Labor Supply: Methodology for Estimation," Rand Corporation, September 1976; J.P. Schultz, "Estimating Labor Supply Functions for Married Women," Rand Corporation, February 1975; and J. Cogan, "Labor Supply with Time and Money Costs of Participation," Rand Corporation, October 1977.

3. The explanatory power of the estimated wage equations are quite low in all the equations based on human capital variables. For example, Cogan's wage equations accounted for 18% of the observed variation (see "Labor Supply with Time and Money Costs of Participation," p. 39) using the NLS for mature women (1967 Survey).

4. U.S. Bureau of the Census, Statistical Abstract of the United States: 1980, Washington, D.C., 1980, Table No. 707. For employees covered in 1980 and later years, the minimum wage rose to $1.90.

5. This regression had 2727 observations. Wages below $.50 and above $20 per hour were dropped. R^2 adjusted for the mean of the dependent variable.

6. The growth rate associated with ED for the average education of 11.36 years almost exactly offsets the coefficient on log w .

7. See Clair Brown, "An Institutional Model of Wives' Work Decisions," Working Paper, Department of Economics, University of California, August 1982.

8. The wage rates used are those reported by William H. Gouger and Kathryn E. Walker, "The Dollar Value of Household Work," Department of Consumer Economics, 1973. These 1971 wages are inflated by the Consumer Price Index to 1974 dollars. These wages are slightly lower than wages reported in the Current Population Survey as used in Janice Peskin, "Measuring Household Production for the GNP," Family Economic Review, U.S. Department of Agriculture, 1982(3), pp. 16-25.

9. Tax rates are from Clair Vickery, "Women's Economic Contribution to the Family," in Ralph Smith, editor, The Subtle Revolution: Women at Work, The Urban Institute, Washington, D.C., 1979.

10. Some flexibility in hours is assumed since women are constrained in the paid hours offered.

11. The income test is made on husband's earnings for women with a husband present. The Social Security thresholds for husband-wife families in 1974 were $3329 (2 people), $3957 (3 people), $5040 (4 people), $5957 (5 people), $6706 (6 people), $8728 (7+ people). Single women were assumed to automatically fail the income test since the income data for them was not good and they do not legally have claims on others' earnings except for child support payments, which are not usually reliable. If a woman's wage was greater than w^*, the income test was ignored since this allowed her earnings above the poverty threshold for at least three children.

12. Of the active cases in 1974, 90% (3894) had sufficient data reported to be included in this analysis.

13. An hours test could be applied here in terms of working up to sufficient income. Since this is not done, categorizing these women's decisions as "economic" is an upper bound.

14. Consumer prices rose 84% between 1974 and 1981. The $2.50 wage is $4.60 in 1974 dollars.

15. Although we might expect new entrants to earn less in the labor market than other sporadic workers, in fact they have the same wage distribution although they work fewer hours. For this reason, the wage distribution of all sporadic workers was assigned to homemakers.